ENERGY CONSERVATION APPLICATION FORM FOR LOW-RISE RESIDENTIAL NEW CONSTRUCTION and ADDITIONS 780 CMR Appendix J

Applicant Name:	Site Address:
Applicant Address:	City/Town:
	Use Group:
A mulicant Dhana.	Date of Application:
Applicant Phone:	Applicant Signature:
\Box "SUNROOM" ADDITION (greater than 40% glazing	ng-to-wall and ceiling gross area)
a Gross Wall + Ceiling Area so ft h Glazin	ng Area ¹ sq. ft. c. Glazing % (100 x b ÷ a)
a. Gross wan rechning Areasq. it. b. Glazin	sq. it. c. Glazing // (100 x 0 · a)
1 Glazing Area may be either Rough Opening or Unit dim	nensions
1 Glazing Thou may be claim though opening of Glaid and	
Attach "Consumer Information Form" from 780 CMR App	pandiv R
Attach Consumer Information Form Holli 700 Civil App	pendix B
Official's Name	Official's Signature:
Application Approved \square Denied \square	Date of Approval/Denial:
Reason(s) for Denial: (provide additional details as neede	ed on back side)

CONSUMER INFORMATION FORM – "SUNROOMS"

Massachusetts State Building Code (780 CMR, Appendix J, Section J1.1.2.3.1)

The Massachusetts State Building Code (780 CMR) includes provisions to ensure that houses and house additions meet energy efficiency standards. This supplemental CONSUMER INFORMATION FORM is to be filed as part of the building permit application when a builder/contractor or homeowner, constructing/installing a house addition with very large percentage of glass to opaque wall, seeks to utilize a special energy conservation exemption option for "sunroom" additions to an existing house (780 CMR, Appendix J, Section J1.1.2.3.1). This FORM is not intended to prevent a homeowner from selection a "sunroom: of any size, configuration, orientation, form of construction or percent glazing, but rather is only intended to assist homeowners in becoming aware of some of the important energy conservation and year- round comfort considerations involved in selecting and utilizing a "sunroom" addition.

The connection of "sunroom" structures to residential buildings <u>may</u> create comfort and energy consumption issues due to uncontrolled solar gain or uncontrolled radiation cooling of the main house. In the selection and construction/installation of "sunrooms", included below is a non-required, open-ended list of product and design considerations that a homeowner may wish to consider before actually constructing/installing a "sunroom". It is recommended that consumers carefully review these options with their designer, builder, or contractor, in order to minimize potential energy consumption and/or house discomfort issues. In addition, the qualifications and reputation of the company or individuals to be hired are important considerations.

PRODUCT AND DESIGN CONSIDERATIONS RELATED TO "SUNROOMS"

- Solar Orientation and Natural Shading
- Type of Glazing
 - Insulating value
 - Solar heat gain
 - Frame materials
 - Glazing to frame sealing and gasketing materials/seal durability and/or weather tightness of the sunroom
- Adequate ventilation Operable windows and fans
- Applied Shading Systems
- Insulation level in floors, walls, and ceilings
- Possible Sunroom isolation from the main house via a wall and/or door or slider
- Heating and Cooling Methods: Efficiency, Zoning and Controls

Homeowner Acknowledgment

The Massachusetts State Building Code, Section J1.1.2.3.1, requires that the <u>actual property owner</u> (not the owner's agent or representative) acknowledge receipt of this CONSUMER INFORMATION FORM prior to issuance of a Building Permit for a project that includes "sunroom" addition to an existing residential building. In accordance with this requirement, the undersigned hereby acknowledges that she/he has read the information in this document concerning sunroom comfort and energy conservation.

Signature of Actual Building Owner	Date		
Print Name	Address of Permitted Project		
Owner Address (if different that project location)	Owner's telephone number		

Emergency Action, Step 1 – Amend the definitions section of 780 CMR Chapter 2 (Section 780 CMR 202.0 General Definitions) by adding a definition for "greenhouse" as follows:

Greenhouse: See 780 CMR 3602.

Emergency Action, Step 2 – Amend the definitions section of 780 CMR Chapter 36 (Section 780 CMR 3602.2 General Building Definitions) by modifying the definition for "greenhouse" as follows (additions underscored:)

GREENHOUSE: An enclosed detached or attached accessory structure consisting primarily of light-transmitting materials and used exclusively for growing plants. *In accordance with St. 1973, c. 672, the provisions of the 780 CMR shall not apply to greenhouses covered exclusively with plastic film, provided, however, that the provisions of M.G.L.c.40A shall continue to apply.*

Emergency Action, Step 3 – Amend Section J1.1.2.3.1 as presented below:

J1.1.2.3.1 Additions to existing buildings:

Additions to existing buildings or structures shall comply with one of the applicable criteria below:

- 1. The new addition, by itself, shall conform to the applicable provisions of Appendix J, or;
- 2. The new addition plus the existing building/dwelling unit may be considered together to ensure compliance with all applicable provisions of Appendix J, or;
- 3. Additions that are open to or separated by an exterior wall from the existing house/dwelling unit shall meet the prescriptive envelope component criteria of Table J1.1.2.3.1. The total area (rough opening or unit dimensions) of glazed fenestration products (windows, skylight, and glazed portion of doors) shall not exceed 40% of the gross wall and gross ceiling area of the addition combined. If any individual fenestration component exceeds the maximum U-value listed in Table J1.1.2.3.1, then the area-weighted average U-value for all fenestration components must be less than or equal to the listed value. The R-value requirements for opaque thermal envelope components indicate insulation products (cavity and/or insulating sheathing), and shall be equal to or exceed the applicable listed values found in Table J1.1.2.3.1. If such additions are separated from the main house by a wall and are conditioned, then a readily accessible manual or automatic means shall be provided to partially restrict or shut off the heating and/or cooling input to the addition space. That portion of a wall that separates the addition from the existing building/dwelling unit, if an existing exterior wall, shall be allowed to remain and neither that portion of said wall or any fenestration within said portion of wall common to the addition need comply with the thermal envelope requirements of Appendix J.

TABLE J1.1.2.3.1

Prescriptive Envelope Component Criteria Additions to

Existing Low-Rise Residential Buildings

MAXIMUM		MINIMUM					
Fenestration	Ceiling	Wall	Floor	Basement Wall	Slab Perimeter		
U-Value	R-Value	R-Value	R-Value	R-Value	R-Value and Depth		
0.39	R-37 ¹	R-13	R-19	R-10	R-10, 4 ft		

¹R-30 ceiling insulation may be used in place of R-37 if the insulation achieves the full R-value over the entire ceiling area (i.e. – not compressed over exterior walls, and including any access openings.)

Emergency Action, Step 4 – Add "Exception to J1.1.2.3.1 to legally address "sunrooms"

Exception: Sunroom Addition/Consumer Notification: Sunrooms, as defined in 780 CMR Appendix J2.0 DEFINITIONS, shall be exempt from the compliance requirements set forth in 780 CMR J1.1.2.3.1 and J1.1.3 provided that the actual property owner (not the owner's agent or representative) of the structure onto which the sunroom addition is being made, provides a signed copy of the Sunroom "CONSUMER INFORMATION FORM" (found in 780 CMR, Appendix B) to the Building Department. This signed "CONSUMER INFORMATION FORM" shall be submitted to the building official as a requirement of building permit issuance, and shall remain as part of the construction documents. If such sunroom additions are separated from the main house by a wall and are conditioned spaces, then a readily accessible manual or automatic means shall be provided to partially restrict or shut off the heating and/or cooling input to the sunroom addition space. That portion of a wall that separates the sunroom addition from the existing building/dwelling unit, if an existing exterior wall, shall be allowed to remain and neither that portion of said wall, or any fenestration within said portion and common to the sunroom addition, need comply with the thermal envelope requirements of Appendix J.

Emergency Action, Step 5 - Amend J2.0 DEFINITIONS, to provide a definition of a "sunroom"

780 CMR J2.0 DEFINITIONS

SUNROOM: An *addition* to an existing building/dwelling unit where the total area (round opening or unit dimensions) of glazed fenestration products of said *addition* exceeds 40% or the combined gross wall and ceiling area of the *addition*.

Emergency Action, Step 6 – Add a "CONSUMER INFORMAITON FORM" (see following page) to Appendix B of the Code and to be located in front of the "OFFICIAL INTERPRETATIONS", also found in Appendix B.